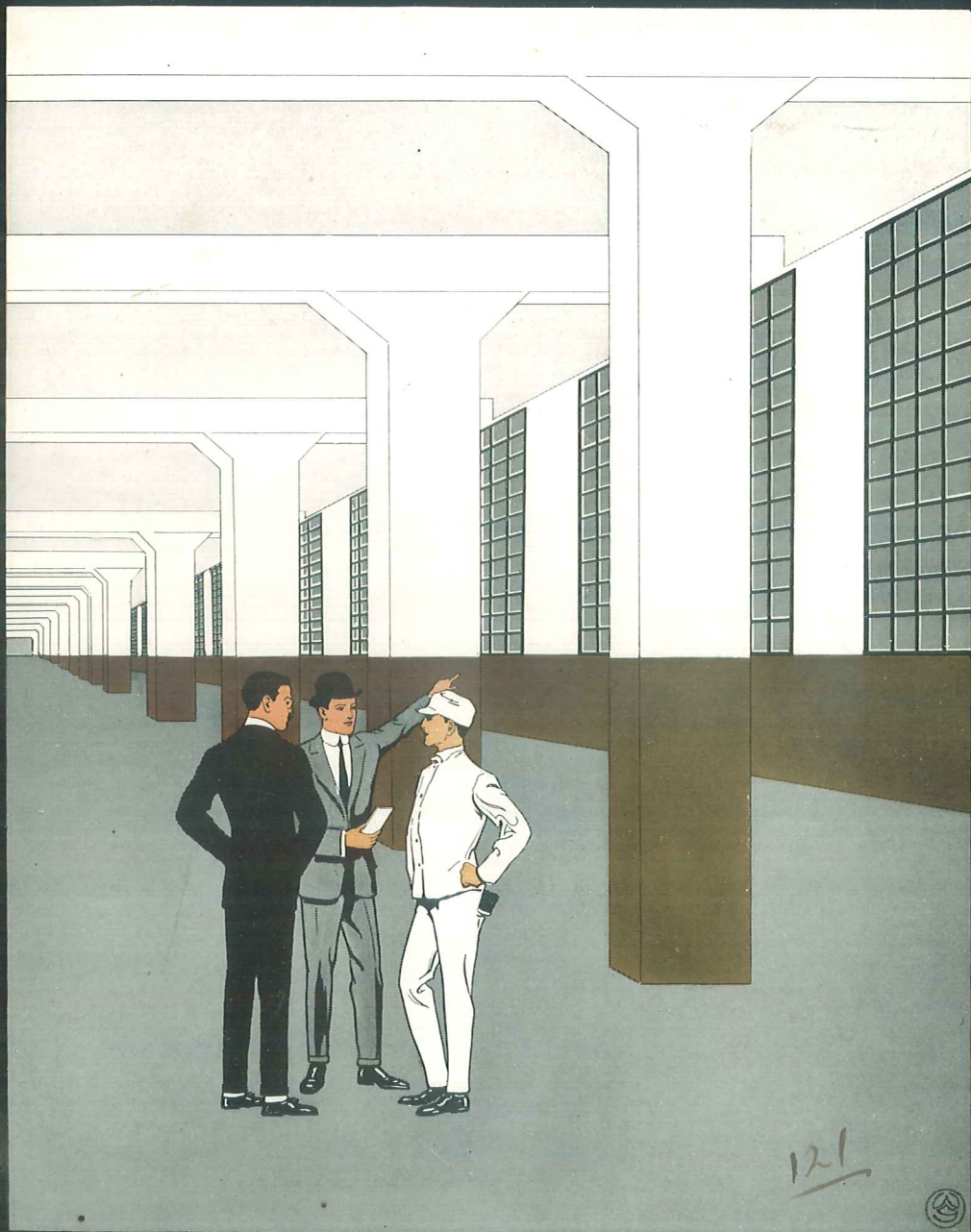
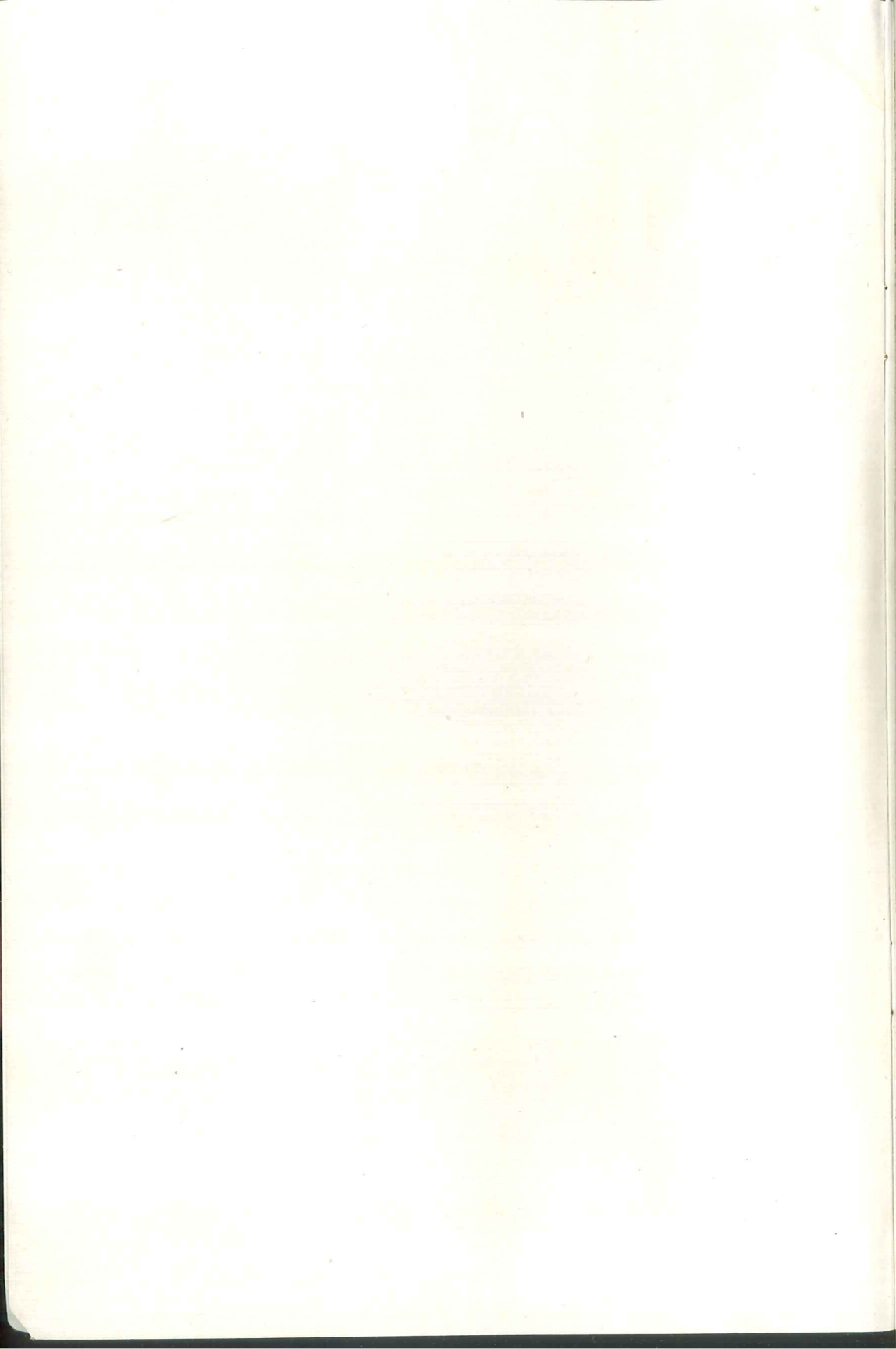


# SOLVING THE PROBLEM OF FINISHING CEMENT WALLS





# Solving the Problem of Finishing Cement Walls

Pratt & Lambert-Inc.  
Varnish Makers

New York  
London

Factories  
Buffalo  
Paris  
Bridgeburg, Canada

Chicago  
Hamburg

Copyright 1915  
by  
PRATT & LAMBERT-Inc.

#### NOTICE

*Vitralite Cement Coating* was formerly known as "*Vitralite Cement Undercoating*," being widely used as an undercoating for *Vitralite*, the Long-Life White Enamel, on cement and concrete. However, on account of its general use as a final coating, as well as an undercoating for *Vitralite*, we have given it the name of "*Vitralite Cement Coating*."

# Solving the Problem of Finishing Cement Walls

## *A New Method*

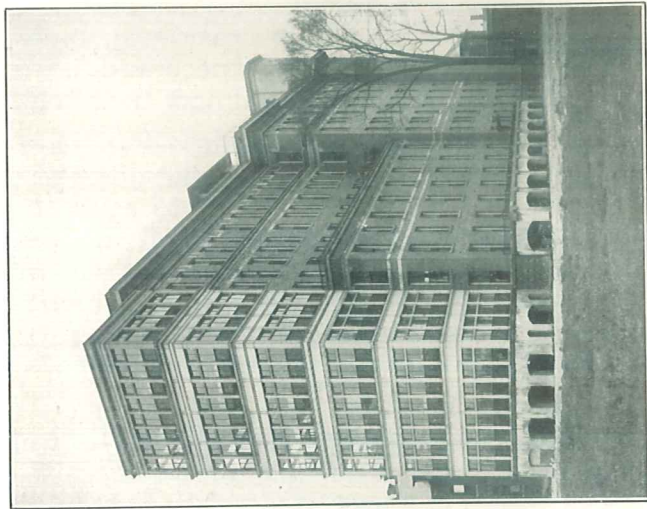
WITH the greater spread of knowledge to every phase of general building construction, shop practice and upkeep, owners of large industrial plants, public buildings and residences, are getting together with their painters and architects, selecting the finish for the cement walls of these buildings on the same basis that they select tool steel or machines. Efficiency and depreciation are being considered as well as first cost. Just as the tool steel, which is cheapest per pound, may really be the most expensive because of more frequent re-sharpening required by the tools—just as the cheap machine may be most costly because of smaller output and greater cost for repair, so the “cheapest per gallon” finishes for cement walls have been demonstrated time and again to be most expensive in final cost. In line with this advanced thought the Vitralite method of finishing walls, although comparatively new, has made rapid strides.

Anyone who has had even a little experience, knows that the finishing of cement, concrete and stucco walls is a finishing problem that will not admit of ordinary treatment.

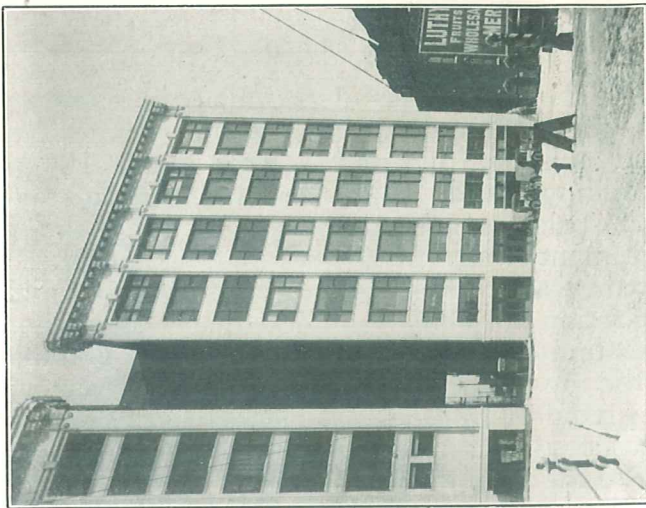
After years of research, Pratt & Lambert-Inc. have produced Vitralite Cement Coating — a flat drying white coating, that exhaustive tests have proven to resist the discoloring and deteriorating action of alkali in cement. Vitralite Cement Coating is made from a very opaque, non-porous pigment and a water-proof liquid, which makes it highly resistant to alkali and very penetrating, so that it thoroughly fills the pores of the cement, concrete or stucco.

Vitralite Cement Coating has been many times proven to resist the severe action of alkali on the walls of large industrial buildings. Not one case of dissatisfaction — not a single instance where it has failed to fulfill the requirements for which it was designed has arisen. It seems safe then to say that Vitralite Cement Coating





*Malomson & Higginbotham, Detroit, Mich., Architects  
J. L. Huxton Memorial Building, of Harper Hospital  
Group, Detroit, Mich.*



*Reeces & Baillie, Peoria, Ill., Architects  
Addition to Block & Kuhl Department Store Building,  
Peoria, Ill.*

Two buildings where Vitralite Cement Coating and Vitralite have helped solve the problem of finishing cement walls

will meet the everyday conditions met with in finishing cement, concrete and stucco walls. It does not become discolored and converted into a lifeless, soapy finish by the alkaline solution in the cement, as do other finishes — neither does it blister nor deteriorate because of moisture coming through.

### *A Porcelain-Like Finish*

While Vitralite Cement Coating is highly water-proof in itself, when used in connection with Vitralite, *the Long-Life White Enamel*, a finish is produced that almost rivals porcelain in its washable, water-proof, water-resisting properties. Vitralite gives a closely knit, compact finish of maximum durability, that will outlast paint on interior or exterior work. It resists gases, extreme heat and cold, steam, every severe condition of industrial use and the abuse of the elements on exterior work. It withstands repeated washing without loss of gloss or durability and does not absorb dirt like white paint or flat wall paints. *It always stays pure white* — cuts down the lighting cost of the building.

### *A Perfect Finish for Plaster and Keene's Cement.*

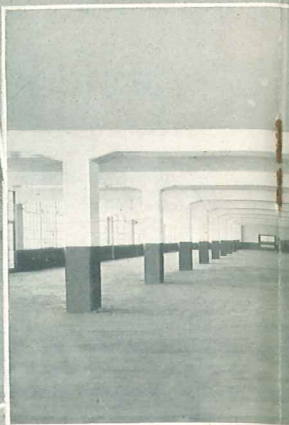
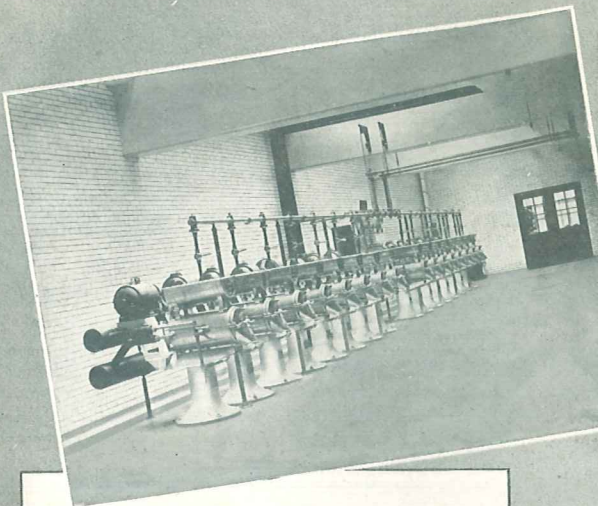
Forming such a beautiful, durable and economical surface on cement, concrete and stucco, the Vitralite method is naturally a perfect finish for ordinary plaster or Keene's cement walls.

### *An Ideal Exterior Finish*

Vitralite Cement Coating and Vitralite are equally as well adapted for outside walls of cement, concrete or stucco as for interior use, as Vitralite has been repeatedly proven to outlast paint, varnish or ordinary enamel finish on exterior work.

### *Retards Disintegration of Exterior Stucco*

Vitralite Cement Coating is particularly well adapted for stucco. It overcomes the cold color of stucco, protects it and retards disintegration. It gives a water-proof finish that prevents corroding of metal lath, unsanitary interior walls and spoiled interior finishes.



Office and Factory  
18-22 ELM STREET  
112-114 N. DEWITT  
Buffalo, N. Y.

Part Cash \* \*  
Foreign Service \*  
Absolute Creditworthiness \*

## WHEAT'S ICE CREAM COMPANY

WHOLESALE AND RETAIL MANUFACTURERS OF

PLAIN & FANCY CREAMS & ICES

OUR GOODS ARE SOLD EVERYWHERE

Buffalo, N. Y. September 25th, 1912

Messrs. Pratt & Lambert, Inc.  
Buffalo,  
New York

Gentlemen:-

In May of the present year we painted the interior of our new factory building, storage and hardening rooms with one coat of your special cement Primer and one coat of Vitralite white enamel. And while we did not believe we would be able to get satisfactory results with two coat work on new cement, which was by no means thoroughly dried, we followed the advice of your Mr. Bitzer, and we are pleased to inform you that we have what we consider a perfect job.

We consider that we put your goods to a very severe test, as we have considerable moisture in our main work room; in our cream storage we have a temperature of 32 degrees above, and in our ice cream storage rooms, we maintain temperatures of 25 below zero, but with this great variation in temperature, there are no cracks, and we have a beautiful white throughout the building.

We would be glad to show anyone interested in good paints through the plant.

We are very much pleased with the results which the Meyer Wagon company have obtained by using your Vitralite on our white wagons.

Very truly yours

WHEAT'S ICE CREAM COMPANY  
*A. C. Sutton*  
President

825-2424

EASTERN OFFICE  
110 BROADWAY  
NEW YORK

GENERAL OFFICE  
200 WEST 10TH ST.  
BUFFALO, N. Y.

## HEWITT RUBBER

RAILWAY SUPPLY

NEW YORK  
BUFFALO

Messrs. Pratt & Lamb  
79 Tonawanda St.  
Buffalo, N. Y.

Gentlemen:-

We have just finished a large number of concrete buildings, 4 feet wide, and three feet high, and three feet deep. All of the interior, ceiling and columns, with two coats of your Undercoating and one White Enamel.

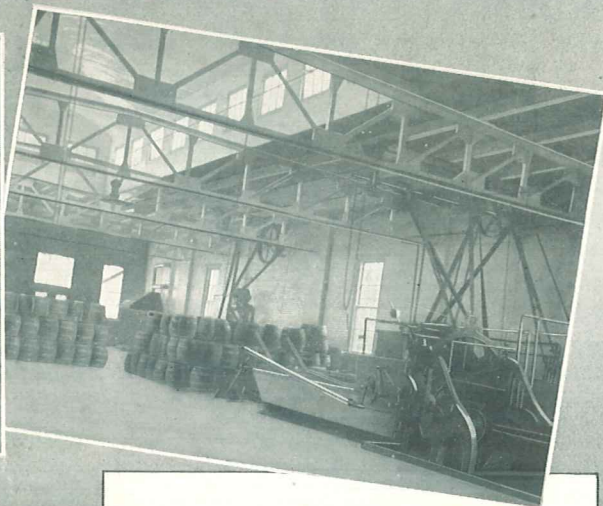
Your materials after a large number of applications, the walls of this building are in favor of Vitralite Enamel, all things considered.

Our opinion is amply justified, as the walls have been nearly a year and are perfectly satisfactory. We do not hesitate to recommend them to any one considering the walls of a concrete building.

8-2

SOME FACTORIES WHERE VITRALITE CEMENT COATING AND VITRALITE  
That Vitralite Cement Coating and Vitralite, the Long-Life White Enamel, will efficient  
of hearty commendation from the officials of the above plants. Read these letters —





OFFICE  
NEW YORK  
N.Y.

## PRATT & LAMBERT SPECIALTIES

Buffalo, September 5, 1914.

Pratt & Lambert, Inc.  
Street,  
New York.

finishes our new  
400 feet long, 90  
feet high,  
including walls,  
we have been finished  
your Vitralite Cement  
one coat of Vitralite

we were decided upon  
samples of com-  
were given a test on  
building, and decided  
lite as being most eco-  
ga being considered.

In this matter has been  
as parts of the build-  
finished now for  
holding up in a per-  
ry way. We therefore  
recommnd Vitralite  
ving the use of it on  
crete building.

Yours truly

*Samuel A. Ell*  
Mechanical Engineer

REGISTERED U.S. PATENT  
MAY 1911



PHOENIX BREWERY  
BUFFALO, NEW YORK

January 15, 1915

Pratt & Lambert Inc.,  
Buffalo, N. Y.

Gentlemen:-

During the past two years we have used Vitralite very extensively throughout our plant. It has given us splendid satisfaction in the cellars, the wash-room, the government cellar, the new bottle shop and in the hop-room which we recently remodeled. In all of these places it has held up beyond our expectations and under very extreme conditions.

It may be interesting for you to know that in a recent test in our new hop-room we found Vitralite to be most economical to use even on the basis of first cost----owing to its ease of application and its splendid covering capacity. This is without reference to its wearing qualities and fine finish after applied.

Of all the high grade enamels we have used----and, we have used many----we are very happy to advise you that Vitralite has given us the best and highest satisfaction and we are pleased to recommend it.

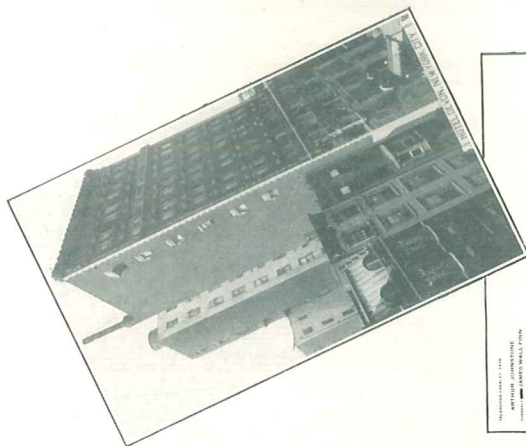
Yours very truly,

PHOENIX BREWERY,

BY

*Amos A. Knicker*  
Treasurer.

VITRALITE WERE USED, AND WHAT OFFICIALS SAY ABOUT RESULTS  
ly meet the conditions met with in practically all factory use, is borne out by the letters  
-they are full of valuable information for any man with similar problems to solve



THEODORE ROBERTSON, INC.  
PAINTS AND PAINTERS SUPPLIES  
18 WALL STREET  
NEW YORK, N. Y.

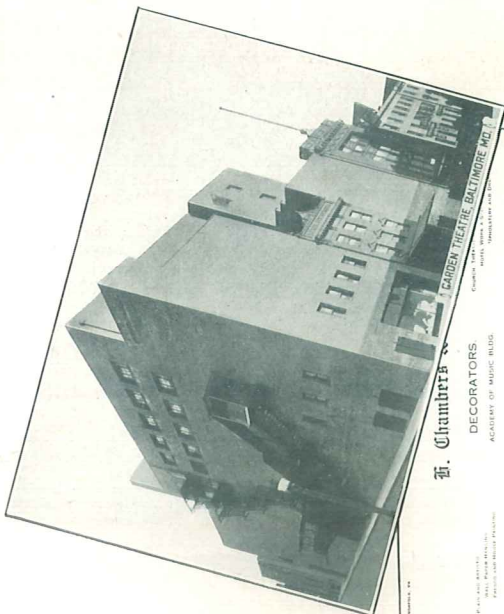
July 15th, 1915.

Frank & Lambert, Inc.,  
Buffalo, N. Y.

Gentlemen:-  
I have just received your letter of the 12th inst. regarding the Vitralite Cement that will not be affected by the alkali in cement. I can only say that the Vitralite Cement is a very good product and I am sure that the first batch were really damp and finished, yet there has been no trouble.

Yours very truly,

*Arthur J. Lambert*



**H. Chambers**  
DECORATORS  
ACADEMY OF MUSIC BUILDING  
BALTIMORE, MD.

BALTIMORE, MD. July 6, 1915.

Messrs. Frank & Lambert, Inc.,  
Buffalo, N. Y.

Gentlemen:-  
I have just received your letter of the 12th inst. regarding the Vitralite Cement that will not be affected by the alkali in cement. I can only say that the Vitralite Cement is a very good product and I am sure that the first batch were really damp and finished, yet there has been no trouble.

Very truly yours,

*H. Chambers*

Buildings finished with Vitralite Cement Coating and Vitralite, the Long-Life White Enamel,  
and what the painters who finished them say about the results

## *The Shortcomings of Most Finishes*

Ordinary paints fail because they encounter chemical conditions which they do not meet with on any other work. They also turn yellow.

Special coatings, flat wall paints, mill whites or "industrial" enamels (which are usually nothing more nor less than cheap enamels) sometimes designed for the purpose, have only too often been found inadequate. They lack durability, and being made from lithopone, will frequently turn gray in strong sunlight. Calcium hydrate, a strong alkaline solution formed from uncombined lime in the Portland cement used in cement and concrete work, discolors the coating with disfiguring tobacco brown streaks and blotches by converting the oil in the finish into a soap-like substance. This destroys the water-proof, washable qualities of most coatings so that they readily disintegrate. Every purpose for which the finish is applied is defeated.

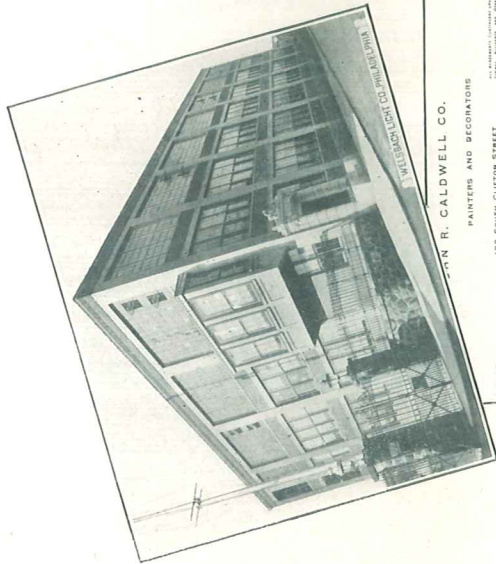
Neutralizing solutions, such as sulphate of zinc and water, are effective only as far as they can penetrate into the surface, and have no effect on the alkali which is deeper in the cement. As the cost of such an application is great, owners will welcome any material which will make its use unnecessary.

## *How to be Sure Before You Start*

Before finishing any building where a considerable quantity of material will be used, it is decidedly worth while to make comparative tests. By spreading a gallon of each of the cement coating materials under consideration, on the walls of a building, a good check can be obtained on covering capacity, easy working qualities or time taken to apply, opacity and finish. When the cement coatings are dry, by spreading a half gallon of the enamels under consideration over their respective cement coatings, a similar check on the enamels can be obtained.

Vitralite Cement Coating and Vitralite will be found to cover one-third to one-half more surface than flat wall





WILLoughby HIGH SCHOOL, BUFFALO, N.Y.

PAINTERS AND DECORATORS

130 SOUTH CLINTON STREET  
PHILADELPHIA JULY 16-1915

Seeger, Pratt & Imbert, Inc.,  
75-79 Tennessee St.,  
Buffalo, N.Y.

"We used Vitralite Cement Undercoating on the exterior of the Willoughby High School at Buffalo, N.Y. The Vitralite Cement Undercoating was selected for its superior adhesive qualities and its ability to resist the alkali in the cement which any painter knows must be present in the material. The results in the alkali conditions are unusually active. ....

Yours very truly,

*John R. Caldwell*



HUTCHINSON HIGH SCHOOL, BUFFALO, N.Y.

ELMER L. ARENZ  
Painting Paperhanging Decorating

ALL WORK GUARANTEED  
ESTIMATED QUOTE ON APPLICATION  
50 MAIN STREET  
BUFFALO, N.Y.

Seeger, Pratt & Imbert, Inc.,  
75-79 Tennessee St.,  
Buffalo, N.Y.

Tonawanda, N.Y. July 1915. 1915-

Gentlemen:

"As you know, I used Vitralite Cement Undercoating on all the exterior of the Hutchinson High School at Buffalo, N.Y. The Vitralite Cement Undercoating was selected for its superior adhesive qualities and its ability to resist the alkali in the cement which any painter knows must be present in the material. The results in the alkali conditions are unusually active. ....

Yours very truly,

*Elmer L. Arenz*

Buildings finished with Vitralite Cement Coating and Vitralite, the Long-Life White Enamel, and what the painters who finished them say about the results



paints, mill whites and industrial enamels, and can be applied approximately one-third faster. One coat of Vitralite Cement Coating and one coat of Vitralite will be shown to have the same opacity as three coats of other materials.

A good idea of the alkali-resisting qualities of the various cement coatings can be obtained by finishing one side of cement blocks, purposely made with two per cent. excess lime, with two coats of the cement coatings. Place them unfinished side down in a trough of water. Leave them there for a few days and then note the condition of the paint film. Flat wall paints and cheap cement coatings you will note have become soft and soapy and can readily be washed off. Vitralite Cement Coating will be found to be unaffected by the alkaline solution.

As a final measure, a weather test may prove interesting. In this event the cement blocks should be finished with a coat of the cement coatings and a coat of the enamels under consideration and placed out of doors at an angle of 45 degrees, facing a southern exposure.

### *Investigate the Economy*

Compared with other finishes, the real economy of Vitralite walls becomes apparent. Considering that labor costs 60 per cent. of the average job, it is at once apparent that while white-wash and cold water paints are low in cost of material, they are expensive in the long run, because they require constant refinishing, while having little to recommend them.

Upon looking into the economy of material and labor effected by using Vitralite, we find some startling facts. On a contract amounting to \$400 for example, the additional cost of Vitralite walls, granting performances of materials equal (which actually they are not) would only be \$20 or \$30 over inferior materials. For such a small amount, when two-thirds of the cost of the job pays for labor, it is only practical economy and good business to have Vitralite satisfaction and efficiency.

# Specifications

## *General Precautions*

Where a "wash" coat of cement has previously been applied, it must not be finished over, as it does not bind itself to the concrete, and when it is coated over with the cement coating, will frequently peel and chip off, leaving the walls badly marred. Where a cement wash has been used, the surface should be rubbed with a wire or other coarse brush, and thoroughly dusted off. Any cement to be finished properly should be hard, so that in scraping with a putty knife it will not loosen up any appreciable amount of cement. It is always advisable to have the cement set as long as possible before applying the finish, so that it may become thoroughly hard and dry. Vitralite Cement Coating has been used with perfect success on damp or even wet surfaces, although we do not encourage its use under such conditions. If thinned properly, it will dry and harden up in a satisfactory manner. Under extreme conditions such as this, more time should be given the coating to dry and harden.

## *Interior and Exterior Work*

For use on cement, concrete, stucco, plaster, Keene's cement, brick and stone, one or more coats of Vitralite Cement Coating, as may be necessary to thoroughly cover, should be used as described below. This will give a durable, washable, flat finish; but where the finest results and a gloss finish are desired, we recommend that this be followed with one or more coats of Vitralite (Gloss).

On coarse cement or brick where two coats of Vitralite Cement Coating are used, the first coat of cement coating should be thinned 10 to 20 per cent. with pure turpentine, and the second coat should be used just as it comes from the can and brushed out well. Where only one coat of cement coating is used, it should be applied just as it comes from the can. It should be applied with a wide, clean brush, keeping the brush full and flowing it out, brushing only enough to settle it into place and not for the purpose of extending it.

Three or four days, or more, should be allowed for the final coat of cement coating to dry before applying Vitralite. The harder and dryer the cement coating before Vitralite is applied, the less it will soak up the finishing coat of enamel and the greater will be the gloss and body.

### *Old Work*

If the old whitewash, calcimine, cold water paint or oil paint finish is in good condition, it should be dusted off to remove any loose dust, then given a coat of Vitralite Cement Coating, applied straight, *not thinned*, and where a gloss finish is desired, one coat of Vitralite (Gloss). If two coats of cement coating are applied, such as over a colored surface, first coat should be thinned 20 per cent., just as for new work. If the old finish is in poor condition it should be removed.

### *Covering Capacity and Colors*

Pratt & Lambert Vitralite Cement Coating will cover about 300 square feet per gallon. Vitralite covers about 500 square feet per gallon, over cement. However, these figures will vary, depending upon the porosity of the surface.

Both Vitralite Cement Coating and Vitralite are made in the white, but any desired shade can be obtained by mixing in color ground in japan. Where the quantity to be used is sufficiently large, any shade selected will be made up on order, with alkali resisting colors.

Samples will gladly be sent on request.

## Pratt & Lambert-Inc. Varnish Makers

Factories

New York

Buffalo

Chicago

London

Paris

Hamburg

Bridgeburg, Canada



